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	Application No.	No. Applicant(s)	
Notice of Allowability	10/726,887	CHARD ET AL.	
	Examiner	Art Unit	
	ANH PHUNG	2824	
The MAILING DATE of this communication ap All claims being allowable, PROSECUTION ON THE MERITS I herewith (or previously mailed), a Notice of Allowance (PTOL-8 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT of the Office or upon petition by the applicant. See 37 CFR 1.3	S (OR REMAINS) CLOSED i 5) or other appropriate comm RIGHTS. This application is	n this application. If not incluunication will be mailed in du	ided ie course. <b>THIS</b>
1. This communication is responsive to			
2. The allowed claim(s) is/are <u>1-37</u> .			
3. The drawings filed on <u>03 December 2003</u> are accepted by	by the Examiner.		
4. Acknowledgment is made of a claim for foreign priority  a) All b) Some* c) None of the:  1. Certified copies of the priority documents hat  2. Certified copies of the priority documents hat  3. Copies of the certified copies of the priority of International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE noted below. Failure to timely comply will result in ABANDON THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	ve been received.  ve been received in Application  documents have been receive  " of this communication to file	on No d in this national stage applic	
5. A SUBSTITUTE OATH OR DECLARATION must be sub INFORMAL PATENT APPLICATION (PTO-152) which gi			NOTICE OF
<ol> <li>CORRECTED DRAWINGS ( as "replacement sheets") m         <ul> <li>(a) ☐ including changes required by the Notice of Draftspe</li> <li>1) ☐ hereto or 2) ☐ to Paper No./Mail Date</li> <li>(b) ☐ including changes required by the attached Examine Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR)</li> </ul> </li> </ol>	erson's Patent Drawing Review   r's Amendment / Comment o	r in the Office action of	he back) of
each sheet. Replacement sheet(s) should be labeled as such in 7. DEPOSIT OF and/or INFORMATION about the department attached Examiner's comment regarding REQUIREMEN	the header according to 37 CF posit of BIOLOGICAL MAT	R 1.121(d). ERIAL must be submitted	
Attachment(s)  1. ☑ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	) 6. ☐ Interview S Paper No. √08), 7. ☑ Examiner's	oformal Patent Application (Poundary (PTO-413),  I/Mail Date  Amendment/Comment  Statement of Reasons for All  Statement of Reasons for All  Ch History	,
	PRIM	ANH PHUNG JARY EXAMINER	

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## Examiner's amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CAR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

In the Specification:

Page 1, line 4, after "Application" insert - Serial No. 10/726,913 --.

The examiner's amendment has been made in order to place the application in a condition for allowance.

2. This Office Action is responsive to the US Patent Application Serial No. 10/726,887 filed on December 3, 2003. Claims 1-37 are pending in the present application.

## Examiner's Statement of Reasons for Allowance

3. Claims 1-37 are allowed.

Bloker et al. (US 5,768,196), Traylor (US 5,473,756), Giebel et al. (US 4,803,657) and Goyal (US 3,997,882) disclose an apparatus having a memory structure similar to that of the present application, but fail to teach:

"a shift register for storing a sequence of bits, wherein the sequence in the shift register comprises a number of bits equal to a ratio of 1/R1 times the integer M; and circuitry for providing a clock cycle to the shift register for selected data operations with respect to any of the word storage locations, wherein the selected data operations are a data read or a data write; wherein in response to each clock cycle, received from the circuitry for providing the clock cycle, the shift

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register shifts the sequence; and wherein one bit in the sequence corresponds to an indication of one of the memory word storage locations from which a word will be read or into which a word will be written" as claimed in the independent claim 1; or

"providing a plurality of clock cycles; for each clock cycle in the plurality of clock cycles, performing a data operation with respect to any of the word storage locations, wherein the data operation is a data read or a data write; for selected ones of the dock cycles, shifting a sequence bits, the sequence of bits comprising a number of bits equal to a ratio of 1/R1 times the integer M; wherein one bit in the sequence corresponds to an indication of one of the word storage locations from which a word will be read or into which a word will be written" as claimed in the independent claim 28.

Also, the dependent claims 2-27 and 29-37 are allowed.

Any comments considered necessary by applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comment on Statement of Reasons for Allowance".

## Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **ANH PHUNG** whose telephone number is **(571) 272-1883**. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD ELMS**, can be reached on **(571) 272-1869**. The fax phone number for the organization where this application or proceeding is assigned is **(703) 872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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**AKP** 

ANH PHUNG PRIMARY EXAMINER

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